



Palo Verde Nuclear  
Generating Station

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102-05200-CDM/SAB/RJR  
January 11, 2005

ATTN: Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Reference: APS letter 102-05000-CDM/SAB/RJR, "APS' 30-Day Response to the Information Requested by NRC Bulletin 2003-02," dated September 19, 2003.

Dear Sirs:

**Subject: Palo Verde Nuclear Generating Station (PVNGS)  
Unit 3  
Docket No. STN 50-530  
APS' 60-Day Letter in Response to NRC Bulletin 2003-02  
Commitment No. 2**

In the letter referenced above, Arizona Public Service Company (APS) made the following commitment.

If APS is unable to perform a bare-metal visual examination of each penetration, APS will provide the information requested in Bulletin 2003-02, Item 1(c), within 60 days of determining that the examination could not be performed.

NRC Bulletin 2003-02, Item 1(c) requested the following information.

(c) If you are unable to perform a bare-metal visual inspection of each penetration during the next refueling outage because of the inability to perform the necessary planning, engineering, procurement of materials, and implementation, are you planning to perform bare-metal visual inspections during subsequent refueling outages? If so, provide a description of the actions that are planned to enable a bare-metal visual inspection of each penetration during subsequent refueling outages. Also, provide a description of any penetration inspections you plan to perform during the next refueling outage. The description should address the applicable items in paragraph (b).

APS performed an as-found visual examination of all 61 bottom mounted nozzles at PVNGS Unit 3 during the 11<sup>th</sup> refueling outage. The as-found examination of all 61 penetrations (360° around each reactor vessel bottom head nozzle interface) was performed by an APS Level III VT-2 qualified examiner using robotic equipment with zoom capabilities. No boric acid deposits were noted during this detailed as-found

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examination. Some bridging and blockage of the nozzle annulus by residual spray-lat coating, tape, and/or insulation was observed. The nozzles are assembled with a slip fit and the bridging/blockage did not restrict the visual examination.

APS and contract employees proceeded to clean the spray-lat coating and foreign material from the nozzle annulus area using a second robot equipped with an elevating cleaning nozzle that sprayed a dry ice media. This method provided a clean zone of approximately one half-inch on either side of the nozzle annulus. Cleaning proceeded until November 11, 2004, when cleaning operations were halted in preparations for reactor restart.

A bare-metal zone was achieved on 23 of the 61 nozzles. Due to differences in the insulation package between units, unforeseen access and maneuverability problems were encountered that could not be resolved within the short window for this project. APS plans to continue to modify this tooling to achieve cleaning of all 61 nozzles. A bare-metal base line visual examination was performed and documented for the 23 cleaned nozzles.

APS plans on performing a follow-up bare-metal visual examination of the 23 clean nozzles and a follow-up as-found visual examination of the 38 remaining nozzles during the Unit 3 12<sup>th</sup> refueling outage in the spring of 2006. Cleaning of the remaining 38 nozzles will recommence during Unit 3's 12<sup>th</sup> refueling outage in the spring of 2006.

Based on the current visual examination, APS concludes that PVNGS Unit 3 meets applicable regulatory requirements related to the structural and leakage integrity of the reactor pressure vessel lower head penetrations.

No commitments are being made to the NRC in this letter. Should you have any questions, please contact Thomas N. Weber at (623) 393-5764.

Sincerely,



CDM/SAB/RJR/kg

|     |               |                                                     |
|-----|---------------|-----------------------------------------------------|
| cc: | B. S. Mallett | NRC Region IV Regional Administrator                |
|     | M. B. Fields  | NRC NRR Project Manager (send electronic and paper) |
|     | N. L. Salgado | NRC Senior Resident Inspector for PVNGS             |